DOCUMENT RESUME

ED 341 237 FL 019 930

AUTHOR Wang, Chuming; Qi, Luxia
TITLE EFL Reading Revisited: A Language Problem or a Reading Problem.
PUB DATE Mar 91
NOTE 25p.; Paper presented at the Annual Meeting of the Teachers of English to Speakers of Foreign Languages (24th, New York, NY, March 24-28, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Students; Comparative Analysis; *English (Second Language); Foreign Countries; Higher Education; *Language Proficiency; *Reading Comprehension; *Reading Rate; *Second Language Learning; *Transfer of Training

ABSTRACT

An empirical study is reported that investigated the relationship between first language (L1) and English-as-a-Foreign-Language (EFL) reading in terms of efficiency, speed, and comprehension with Chinese university students of English as subjects. Results indicate that reading speed transfers readily from L1 to EFL readers for those who are slow in reading speed, weak in comprehension, and poor in English proficiency. Transfer of reading comprehension is much less predictable regardless of reading abilities and English proficiency. However, English proficiency is a fairly good predictor of English reading efficiency for the more proficient readers, particularly those with good comprehension. These findings shed light on the issue of whether EFL reading is a reading problem or a language problem. The study also suggests that transfer might best be viewed as a continuum in which some reading components are more easily transferred than others. Pedagogical implications of the study are discussed. Contains 13 references. (Author/LB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED341237

EFL reading revisited:

A language problem or a reading problem

Wang Chuming
Qi Luxia
Guangzhou Institute of Foreign Languages

ABSTRACT

This article reports an empirical study investigating the relationship between L1 and EFL reading in terms of efficiency, speed and comprehension with Chinese university students of English as subjects. Results indicate that reading speed transfers readily from L1 to L2 for those who are slow in reading speed, weak in comprehension and poor in English proficiency. Transfer of reading comprehension is much less predictable irrespective of reading abilities and English proficiency. However, English proficiency is a fairly good predictor of English reading efficiency for the more proficient readers, particularly the good comprehenders.These findings throw light on the issue whether EFL reading is a reading problem or a language problem. The study also suggests that transfer might best be viewed as a continuum in which some reading components are more easily transferred than the others. Pedagogical implications of the study are discussed.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Qi Luxia

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FL 019 930

BEST COPY AVAILABLE

EFL reading revisited:

A language problem or a reading problem

Wang Chuming
Qi Luxia
Guangzhou Institute of Foreign Languages

One of the major research issues in EFL reading concerns whether EFL reading is a language problem or a reading problem (Alderson, 1984; Coady,1979; Yorio,1971). A clearer yet far from complete picture has emerged from the perennial studies over the past two decades or so and particularly since Alderson's extensive review regarding this issue (Clarke,1979; Cziko,1980; Perkins et al,1989; Carson et al, 1990). Most of these studies depended on a revelation of transfer from L1 to L2 reading. Correlations served as an indication of the degree of such transfer. A high correlation between L1 and EFL reading suggests that EFL reading is a reading problem.

It is common sense, however, that without sufficient knowledge of L2 it is impossible to do L2 reading.The study carried out by Perkins et al showed that there existed a threshold L2 proficiency for L1 reading abilities to transfer to L2. A significant correlation between L1 and L2 reading was obtained only when the reader's L2 proficiency reached a relatively high level, below which the correlations were inconsistent and largely insignificant.The point is that the threshold level seems intangible. Take Perkins' study for instance, significant correlations between L1 and L2 reading were found in terms of comprehension which involved questions concerning facts, inference and generalization.

The cognitive load for each of these components imposed on the reader might not be the same. Is it likely that the threshold, if it exists at all, goes lower as the reading task is cognitively less demanding?

Despite the controversies over the issue, nowadays there has been a general agreement that transfer from L1 to L2 reading does occur (Block,1986; Carson, et al,1990). What remains to be clarified is: under what condition transfer takes place, which component or components of reading transfer, which component is more likely to transfer than the other components ,and how much is transferred.

Through years' teaching of EFL reading to the Chinese university students of English, we have been puzzled at the great individual variation in the speed at which our students read English materials and in the comprehension evaluated at the end of reading,in spite of the fact that they appeared fairly homogeneous in their English proficiency as measured by the national university entrance examination upon entering the university. Some students apparently read much faster than the others and the comprehension scores for a reading text can vary from zero to full marks. The differences between the fast and slow readers and between the good and poor comprehenders are so striking that we begin to wonder how this has come about.

These differences are attributable to two major sources: one is verbal and the other non-verbal. The verbal aspect largely excludes L1, as we need L2 to do L2 reading not L1 and Chinese is graphically so different from English. The non-verbal aspect includes background knowledge related to the reading task and L1

and L2 reading abilities. The relationship between L2 reading abilities and L2 reading is self-evident. What is not very clear is the role of L1 reading abilities in L2 reading and whether the non-verbal aspect is the same for both L1 and L2 reading. If it is the same, the difference in L2 reading might be due to the differences in L1 reading for the non-verbal aspect on the one hand and to differences in L2 proficiency for the verbal aspect on the other. Obviously. our students did not start from scratch when they read English. Before they started their university English course, our students had already read numerous materials in Chinese and formed their own style of reading, knowing how to obtain information from texts, consciously or unconsciously manipulating their reading speed. Probably some knew how to vary their reading speed according to their needs, others might read all kinds of materials at more or less uniform and stable speeds for lack of proper training. Such L1 habits and reading strategies which might vary from individual to individual, if transferable, along with the students' varied L2 proficiency, might contribute to the large differences in their L2 reading. However, these remain speculations and need supporting evidence from empirical research. The crux of the matter is to what extent L1 reading is similar to L2 reading, whether the former is transferable to the latter and to what extent the difference in L1 reading abilities and L2 proficiency contributes to L2 reading. Answers to these questions would help unravel the controversy over the reading research issue at hand. With these questions in mind, we set out to carry out a study which addressed two relevant problems: first, transfer of reading from L1 to L2; second, the role of English in EFL reading.

Method

Subjects. The participants in the study were a total of 113 second-year students of English in the English Department at Guangzhou Institute of Foreign Languages (GIFL), China. Their age range was from 18 to 20. Normally they had learned English as a foreign language at secondary schools for six years before they were enrolled into GIFL through a highly competitive national university entrance examination which included an English test. At the time of the present study, the subjects had just taken a major comprehensive English test intended to evaluate their progress in listening, reading and writing in the middle of their third 20-week semester.Years' use of this test had proved it to be a reliable measure with good discrimination power and match the teachers' ranking of the students' English proficiency . For lack of information of our subjects' performance on any established standardized English test, we used this test as a criterion measure against which our subjects' reading performance in this study was analyzed. However, from their academic records, we learnt that the TOEFL mean scores normally fell between 500 and 510 for the previous groups of second-year students in the same department who had taken TOEFL tests, therefore, we had good reason to believe that our subjects' mean TOEFL score might fall on that range as well. This information was useful if we wanted to generalize our experimental findings.

Materials. Three Chinese and three English passages were selected representing narrative, descriptive and expository texts. We saw

to it that each type of text had one Chinese passage and one English passage. We selected three passages rather than one for a reading task because our principal concern was our subjects' mean reading performance and more passages would lend themselves to a more discriminative and reliable evaluation of their reading abilities. No attempt was made to adapt or change the selections as, for one thing, there was no equivalence between a Chinese character and an English word. One Chinese word can be made up of one , two, three or four characters but rarely exceeds four. The three Chinese passages had a total of 5498 characters and the three English passages amounted to 1556 words. Each passage was followed by some comprehension questions. There was one Chinese passage and one English passage with 20 true-false questions each. The remaining comprehension questions were all set in multiple-choice format with 19 for the Chinese passages and 22 for the English passages.

Procedure. The experiment was run in two sessions during the normal reading lessons on the class basis. The 113 subjects were from six classes. Three classes read the English passages in the first session and the Chinese passages in the second. The order was reversed for the other three classes. During each session, the subjects were required to read three passages one by one and as fast as they possibly could. They were also told to comprehend the passages as much as possible and their comprehension was to be tested immediately after reading. Each passage was handed out face-down. The subjects were asked to turned it over and start reading at the same time. The beginning time was recorded by the experimenter. A clock was used for the subjects to record the

finishing time. When a subject finished his or her reading, the experimenter immediately collected his or her passage and gave the subject a comprehension question sheet. The subject answered the questions according to his or her comprehension and recall of the contents of the passage. No time limit was set for answering the questions. All subjects followed the same procedure in reading both the Chinese and the English passages. Each session of the experiment lasted approximately 25 minutes.

Scoring. Chinese and English passages were scored separately. As the number of comprehension questions varied with passages, the percentage of correct answers to the questions for each passage was calculated so that the weighting of each passage remained the same in terms of the comprehension score. For either the Chinese (L1) or the English (L2) task, the three percentages were added up and divided by three to obtain a mean percentage, which was subsequently used to denote a subject's comprehension score for one reading task. Thus, each subject had two comprehension scores, one for the three Chinese passages, the other for the three English passages. Take the calculation of a subject's English comprehension score for example, we first counted the number of correct answers to the questions for one passage to arrive at a percentage, then added up the three percentages for the three English passages and finally divided it by three to obtain a mean percentage, which was used as a representation of the subject's L2 comprehension score.

A subject's L1 reading speed was defined as the number of Chinese characters that the subject read per minute (CPM). The L2

reading speed was determined by the number of English words which a subject read per minute (WPM). Since our subjects were required to do their best to comprehend the passages and read fast at once, there was the need for a good indicator which took both comprehension and speed into account. Such an indicator, called reading efficiency, was calculated by multiplying an individual's reading speed by his or her comprehension score. For example, if a subject's L2 comprehension score was 70% and he could read 150 wpm, his reading efficiency would be 150 X 70% = 135. Reading efficiency index was relative and became meaningful only through comparison with other subjects.

Results

General Tendency

The means,standard deviations and ranges of the subjects' reading speed, comprehension and efficiency were summarized in Table 1. The mean score for the English test which represented the subjects' English proficiency were also included.

Table 1.

Means, Standard Deviations and Ranges for Subjects' Reading Efficiency, Comprehension, Speed and English Proficiency

	L1 Reading			L2 Reading			Eng. Prof.
	Effi.	Speed	Comp.	Effi.	Speed	Comp.	
Mean	400	663	60	86	132	64	66
SD	96	136	8.8	23.6	24	11	9.7
Range	216-590	397-1014	41-79	46-144	90-204	41-86	40-92

What was worth noting in Table 1 is the large variations in the subjects'performance of the two tasks and their English proficiency scores. This confirmed our classroom observation. Not unexpectedly, the subjects' L1 reading speed and efficiency were higher than their L2 reading speed and efficiency. However, the L1 comprehension mean score was somewhat lower than the L2 comprehension mean score. Two factors might account for this: First,we suspect that reading too fast might hamper comprehension. Our subjects read Chinese passages a lot faster than they did the English passages. The fastest reader could read 1014 CPM. Second, subjects tended to grasp main ideas in the Chinese passages. Or, all they could remember after reading was main ideas when they read fast. To verify this, we picked out two MC questions, one from the L1 reading task and the other from the L2 task, which probed main ideas. A simple calculation showed that 64% of the subjects got the L1 question right as against 57% correct for the L2 question, even though the L1 comprehension scores were on the whole lower.

Table 2
Factor Analysis

	Factor 1	Factor 2	Factor 3
L1 Reading Efficiency	.14	.83	.51
L1 Reading Speed	.12	.94	.06
L1 Reading Comprehension	.10	.04	.95
L2 Reading Efficiency	.86	.40	.13
L2 Reading Speed	.55	.62	-.13
L2 Reading Comprehension	.76	-.02	.37
L2 Proficiency	.76	.13	-.04

Table 2 displays results from factor analysis of the data. Three factors could be identified. Factor 1 could be regarded as English proficiency since all values related to the English tasks stood out in contrast to those of the Chinese tasks. This sug-

gests that L2 proficiency plays an important role in L2 reading. Factor 2 could be understood to be reading speed, as the speed-related values for both L1 and L2 reading were high in comparison with comprehension and English proficiency. The third factor must have to do with comprehension, although less evident than the first two factors.

Table 3
Correlation Matrix

	L1 Reading			L2 Reading			Eng.Prof.
	Effi.	Speed	Comp.	Effi.	Speed	Comp.	
L1 Reading							
Effi.	-	.80**	.52**	.50**	.47**	.30**	.25*
Speed		-	-.09	.45**	.50**	.20	.23*
Comp.			-	.22*	.08	.27*	.12
L2 Reading							
Effi.				-	.78**	.73**	.54**
Speed					-	.16	.44**
Comp.						-	.37**
Eng. Prof.							-

The correlations in Table 3 revealed the relationships between reading efficiency, speed, comprehension and English proficiency. Although most of the correlation coefficients were moderate, they suggested some noteworthy tendency. In order to see more clearly the relationship between L1 and L2 reading, we picked out and listed in Table 4 those correlation coefficients of great concern and interest to us.

Table 4
Correlations for L1 and L2 Reading Tasks

L1 reading efficiency vs. L2 reading efficiency	.50**
L1 reading speed vs. L2 reading speed	.50**
L1 reading comprehension vs. L2 reading comprehension	.27*
L1 reading speed vs. L1 reading comprehension	-.09
L2 reading speed vs. L2 reading comprehension	.16
L2 proficiency vs. L2 reading efficiency	.54**
L2 proficiency vs. L2 reading speed	.44**
L2 proficiency vs. L2 reading comprehension	.37**

* $p < .01$ **$p < .001$

Three relationships are worth noting:

1. The relationship between L1 and L2 reading efficiency showed moderate correlation (r=.50). If we look at reading speed and comprehension simultaneously, the relationship between L1 and L2 reading speed (r=.50) is more predictable than that between L1 and L2 reading comprehension (r=.27). These correlations suggest a tendency of transfer between L1 and L2 , yet more of speed than of comprehension. Low correlation between L1 and L2 comprehension suggests that a good L1 comprehender might not necessarily be a good L2 comprehender.

2. The relationship between reading speed and comprehension was the least predictable. It was true of both L1 and L2 reading tasks.

3. The correlation between L2 proficiency and L2 reading efficiency was the highest in comparison with the other correlations in Table 4. However, if we compare the relationship first between L2 proficiency and L2 reading speed (r=.44) and then between L2 proficiency and L2 reading comprehension (r=.37), we can see that the former was stronger than the latter.

The above results barely answer our central question regarding whether EFL reading is a reading problem or a language problem. To have a clearer picture of the relationship between L1 and L2 reading and the effect of L2 proficiency on L2 reading, we need to examine another important variable which affects our experimental results, namely, the subjects' reading abilities in both L1 and L2 and their L2 proficiency. Good and poor readers might adopt different approaches to reading tasks. High and low L2 proficiency readers might not be the same in reading in L2

(Carrell, 1983; Evans, 1988). A comparison of their reading performance and L2 proficiency might deepen our understanding of the reading process and throw some light on our concern about a threshold L2 proficiency for transfer to occur. Therefore, we set out to rank all 113 subjects in accordance with their scores in four dimensions: reading efficiency, speed, comprehension and English proficiency. The ranking gave rise to four kinds of top groups and four kinds of bottom groups. For each kind there was a Chinese top (or bottom) group and an English top (or bottom) group. For example, there was a Chinese top group of efficiency and an English top group of efficiency based on the reading efficiency scores. Since all subjects read both Chinese and English passages, each subject thus had two scores for reading efficiency. The exception was the English proficiency dimension, for which there was only one top group and one bottom group. In our study the top 35 subjects formed the top group and the bottom 35 made up the bottom group. The following discussion will be based on such a regrouping of data and focused on the two problems mentioned earlier: transfer and the role of English proficiency in EFL reading.

1. Transfer

The correlations between L1 and L2 reading efficiency for all top and bottom groups were listed in Table 5. There was a fairly consistent tendency that transfer of reading efficiency occurred with the bottom groups upon which most of the significant correlation coefficients fell. For the bottom group of L1 comprehension, in particular, a fairly high correlation (r=.74) obtained. This suggests that the poor L1 comprehenders usually read both

Chinese and English with low efficiency or relatively high efficiency. Their L1 reading abilities as measured by reading efficiency was likely to transfer to L2 reading. Such a finding gave empirical support to the hypothesis (Alderson, 1984:4) that "poor reading in a foreign language is due to poor reading ability in the first language",which is largely the case with our poor L1 comprehenders.

Table 5
Correlations between L1 and L2 Reading Efficiency

	Effi.		Speed		Comp.		Eng. Prof.+	
	top	bottom	top	bottom	top	bottom	top	bottom
L1 Group	-.003	.37	.18	.45**	.31	.74**		
L2 Group	.30	.46*	.35	.46*	.33	.38	.44*	.54**

Table 6 could help us understand the relationship between L1 and L2 reading speed. No significant correlations were found with top groups, suggesting that good readers might not read both languages equally fast. On the contrary, all bottom groups showed moderate to high correlations. The fact that there was a significant correlation for the bottom group of L1 reading speed (r=.49), but not for the bottom group of L2 reading speed (r=.24) showed evidence that reading speed tended to transfer from L1 to L2.

'+' denotes an exception that there was only one top group and one bottom group based on the English test which our subjects took just prior to the experiment.

Table 6
Correlations between L1 and L2 Reading Speed

	Effi.		Speed		Comp.		Eng. Prof.	
	top	bottom	top	bottom	top	bottom	top	bottom
L1 Group	.18	.71**	.21	.49*	.12	.67**		
L2 Group	.30	.51**	.28	.24	.38	.58**	.36	.72**

The correlation was the highest between L1 and L2 reading speed (r=.72) for the bottom group of English proficiency. This could be taken to mean that for those subjects of poor English proficiency, if they read Chinese slowly, they were also likely to read English slowly. For those more proficient in English the relationship between L1 and L2 reading speed became obscure and far less predictable (r=.36). The correlation between L1 and L2 reading speed for the bottom group of L1 reading efficiency was also high (r=.71). Since there was a strong tendency of transfer of reading speed from L1 to L2 for subjects of low L2 proficiency, we felt strongly that the problem of L2 reading speed, particularly for the poor L1 readers, could be traced back to L1 reading. As the learners' reading comprehension and L2 proficiency improved, the influence of L1 reading speed on L2 reading decreased. This gives supporting evidence to Alderson's argument that " the less of the foreign language you know, the more likely you are to read as in your first language" (P.11). But, as is shown here, it is true of reading speed.

In contrast to a fairly strong transfer of reading efficiency and speed from L1 to L2 for the bottom groups, there is nonetheless hardly any convincing evidence of transfer of reading comprehension. The only exception was the Chinese bottom group of reading

speed, for which there was only a moderate correlation (r=.40, see Table 7).

Table 7
Correlations between L1 and L2 Reading Comprehension

	Effi.		Speed		Comp.		Eng.Prof.	
	top	bottom	top	bottom	top	bottom	top	bottom
L1 Group	.24	-.21	.04	.40*	.04	.12		
L2 Group	.006	.31	.28	.38	-.10	.03	.19	.12

Wang (1981) obtained a similar result in a reading experiment applying Meyer's Content Structure model (Meyer,1976) to the analysis of a Chinese text and an English text. The subjects were third-year students of English major from the same department as those in the present study. They read both Chinese and English texts of similar structure and recalled the contents after reading. Those subjects who recalled more top-level information from the Chinese text did not necessarily recalled more top-level information from the English text and vice versa. The correlations between the two reading tasks for all top and bottom groups were low and statistically insignificant.

Our findings indicate that those good L1 comprehenders may not be good L2 comprehenders and vice versa. Although there were suggestions (see Alderson,p.17) that there was " no direct transfer of ability or strategies across languages, and that foreign Language competence is required before transfer can occur" and that "given equivalent proficiency in the second language, the superior reading skills of the good readers would provide them with an equal advantage over the poor readers in both languages." Such a position that reading is the same in all languages did not find

support in the present study as far as reading comprehension was concerned. For both the top and the bottom group of English proficiency, correlations between L1 and L2 comprehension were low and statistically insignificant (r=.19 and r=.12 respectively). Higher level of English proficiency did not seem to make reading comprehension skills more transferable from L1 to L2.

Reading comprehension is a very complicated psychological and cognitive process which involves more than language proficiency. In an experiment we carried out prior to the present one with the second-year EFL students at GIFL, we found that text-related background knowledge produced a much stronger effect on comprehension than language complexity of the text (Qi and Wang,1988). If our subjects were assumed to be able to utilize background knowledge of some kind and if it entailed individual differences and was not under our control in the present study, then transfer of comprehension involving uncontrolled background knowledge would be difficult, if not impossible, to predict.

On the basis of the above findings, a tentative conclusion might be reached that transfer of reading abilities is not a matter of all or nothing. The complicated process of reading might best be broken down into its components in terms of the cognitive load involved. Some of these components might be more transferable than the other. Transfer of high-level components such as comprehension, inference, evaluation which involve complex cognitive process is task-specific, dependent on the type of question asked and on the condition under which the reading task is performed. For the cognitively demanding tasks, low correlations might

normally occur, whereas for the low-level and more mechanical reading components such as eye movements, word identification and those reading skills involving more motor-perceptual operations, having been automatized in L1 reading, and bearing little on the reading contents and comprehension questions asked, transfer is more likely. Thus, transfer might be viewed as a continuum, hinging on the cognitive load involved in the reading task at hand. On one extreme stand the low-level reading skills which might have been automatized in L1 reading and are more apt to transfer; on the other are the high-level comprehension skills which are variable, task-specific, and less predictable.

We assume that, compared with reading comprehension, reading speed involves more automatized habits rooted in L1 reading. When our subjects' attention was focused on comprehension while reading as fast as possible, the automatized and time-honored L1 reading habits which demands least attention might readily transfer to the L2 reading task. It might be these habits that underlie both the L1 and L2 reading task for readers of low L2 proficiency and contribute to the high correlation thus obtained in the present study. The bottom group subjects, in particular, who were less proficient in English, weaker in comprehension and slower in reading speed, would consciously or unconsciously apply their L1 reading strategies for the completion of the speed reading task at hand. With an improvement of L2 reading skills and L2 proficiency, the subjects might free themselves from L1 reading habits and have L2 skills to rely on to cope with the L2 reading tasks, thus obscuring the relationship between L1 and L2 reading.

The above results would also bring us to the question whether there is a threshold L2 proficiency for transfer to occur. If we view the transfer process as a continuum, we would find it hard to decide on a cut-point for the L2 proficiency threshold . In terms of reading speed, the lower the L2 proficiency, the more likely the transfer. But transfer of high-level comprehension skills might be far less predictable unless some cognitive factors are brought under strict control. Even if these cognitive factors are well controlled, correlation may still not be very high (see Perkins,et al 1989). L2 proficiency is just one of those significant factors that cause transfer. It is no surprise at all that our experiment did not come up with any evidence of a threshold L2 proficiency in spite of the division of top and bottom groups of English proficiency (see Table 7).

2. The role of L2 proficiency in EFL reading

To examine the issue whether EFL reading is a language problem, let's look at the relevant data in this study. Table 8, 9 and 10 summarize the correlations between English proficiency and English reading in terms of efficiency, speed and comprehension for all English (L2) top and bottom groups.

Table 8

Correlations between L2 Proficiency and L2 Reading Efficiency

	Effi.		Speed		Comp.		Eng. Prof.	
	top	bottom	top	bottom	top	bottom	top	bottom
L2 Group	.47*	.24	.43*	.31	.71**	.36	.53**	.17

Table 9

Correlations between L2 Proficiency and L2 Reading Comprehension

	Effi.		Speed		Comp.		Eng. Prof.	
	top	bottom	top	bottom	top	bottom	top	bottom
L2 Group	.45*	.12	.47*	.35	.53**	.03	.43*	-.17

Table 10

Correlations between L2 Proficiency and L2 Reading Speed

	Effi.		Speed		Comp.		Eng. Prof.	
	top	bottom	top	bottom	top	bottom	top	bottom
L2 Group	.18	.15	.11	-.07	.61**	.42*	.36	.40*

Table 8 showed a consistent tendency that English proficiency was a significant predictor of L2 reading efficiency for all L2 top groups, but not for the bottom groups. The strongest link existed for the English top group of comprehension (r=.71). Obviously, L2 proficiency had an important role to play in L2 reading efficiency. The significant correlation of the English proficiency top group (r=.53) also supported the tendency. If we look at all top groups of comprehension in Table 8, 9 and 10, we will find that the corresponding coefficients (r=.71, .53 and .61) are the highest in each table. In Table 9, for all top groups, the correlations were significant but not so with the bottom groups, suggesting that English proficiency was a better predictor of reading comprehension for more efficient readers. However, for

the poorer L2 readers, English proficiency did not predict very well their English reading comprehension. The extremely low correlation (r=.03) pertaining to the English bottom group of comprehension suggested that poorer comprehenders were not necessarily low in English proficiency and that other factors than English proficiency also had a role to play in comprehension tasks.

The correlation between L2 proficiency and L2 reading speed was less consistent (see Table 10). In order to see more clearly the effect of English proficiency on English reading speed and comprehension respectively, we used t-test to compare first the reading speed of the top and bottom groups of English proficiency and then their reading comprehension (see Table 11).

Table 11
Comparison between Top and Bottom Groups of English Proficiency in L2 Reading Speed and Comprehension

	English Proficiency					
	Top Group		Bottom Group			
	M	SD	M	SD	t	
L2 speed	145.03	25.29	122.11	22.48	4.01	P<.001
L2 comp.	69.42	10.53	58.10	10.28	4.55	P<.001

Both the top and the bottom group of English proficiency differed highly significantly in their L2 reading speed and comprehension. In general, those more proficient in English read faster and with better comprehension than those less proficient in English. So an improvement in L2 proficiency did much to facilitate L2 reading

speed and comprehension irrespective of the individual differences in L1 reading speed and comprehension. Lower English proficiency not only slows down L2 reading speed and impedes comprehension but also makes reading speed transfer from L1 to L2 (see Table 6). Poor English proficiency increases the likelihood that readers would fall back on their L1 reading habits and skills at the moment when the reading task demands efficiency. Transfer is far less clear as the reader's L2 proficiency improves.

Summary

The above results and discussion showed that for readers of low L2 proficiency and poor reading abilities either in L1 or in L2 , we have produced evidence of transfer of reading efficiency and speed from L1 to L2. Transfer of reading comprehension was the least predictable for both good and poor readers.On the contrary, L2 proficiency was a fairly good predictor of L2 reading efficiency for the more proficient readers, especially the good comprehenders. English plays a major role in EFL reading.

As to whether reading in a foreign language is a reading problem or a language problem, Alderson had this to say, "it appears to be both a language problem and a reading problem, but with firmer evidence that it is a language problem, for low levels of foreign language competence, than a reading problem." Our study seems to have borne out his contention. Alderson was also right in saying that the question needed further refinement and intense investigation. The results of our experiment have shown that under the cover term 'reading', some components (e.g. reading speed) might be more subject to transfer than the other (e.g.

comprehension), depending on the reader's reading abilities and L2 proficiency. The transfer process might best be viewed as a continuum, hinging on the cognitive load involved in L2 reading. Our study suggests that in order to clarify the reading-or-language-problem issue, we need first and foremost to define what the 'reading problem' is and make it testable. Furthermore, more empirical research is necessary to investigate other reading components and even comprehension needs to be decomposed and intensely studied to uncover its differential transfer effects before we gain a thorough understanding of the role of L1 reading abilities and L2 proficiency in L2 reading.

One pedagogical implication from our findings is that if an L2 learner has been found to be a slow reader and L2 proficiency is not the chief cause, then there is every reason for the teacher to enquire into his or her L1 reading strategies and help him or her overcome erroneous habits. The training of reading speed in L2 might probably be done either by using L1 or L2 reading materials. Presumably, it is even better to use L1 reading materials as it would not present any language problem for the trainees and helps form good reading habits. From the data collected in the present study (see Table 1), we know there exists great variation in L1 reading speed of our subjects. Since transfer of reading speed is almost certain, the individual differences in L1 reading speed have to be taken into serious consideration for any EFL reading program. A simple truth which has been empirically tested is that L2 readers need to improve L2 proficiency in order to enhance reading speed and comprehension, particularly the latter.

References

Alderson, J. C. 1984. Reading in a foreign language: A reading problem or a language problem? In J. C. Alderson & H.Urquhart (Eds.), Reading in a Foreign Language (pp.1-27). New York: Longman.

Block, E. 1986. The comprehension strategies of second language readers. TESOL Quarterly, 20, 463-497.

Carrell, P. L. 1983. Three components of background knowledge in reading comprehension. Language Learning, 33, 183-207.

Carson, J. E., P. L. Carrell, S. Silberstein, B. Kroll and P. A. Kuehn. 1990. Reading-writing relationships in first and second language. TESOL Quarterly, 24, 245-266.

Clarke, M. A. 1979. Reading in Spanish and English: evidence from adult ESL students. Language Learning, 29, 121-145.

Coady, G. A. 1979. A Psycholinguistic model of the ESL reader. In R.Mackay, B. B.arkman, and R. R. Jordan (eds.), Reading in a Second Language. Rowley, Mass.: Newbury House Publishers.

Cziko, G. A. 1980. Language competence and reading strategies: a comparison of first and second language errors. Language Learning, 30, 101-116.

Evans, E. E. 1988. " Advanced" ESL reading: language competence revisited. System, 16, 337-346.

Meyer, B. J. F. 1975. The Organization of Prose and Its Effects on Memory. Amsterdam: North-Holland Publishing Co.

Perkins, K. S. R. Brutten and J. T. Pohlmnn. 1989. First and second language reading comprehension. RELC Journal, 20,1-9.

Qi, L. & C. Wang. 1988. Background knowledge and language com plexity in reading comprehension. Foreign Language Teaching and Research, 2/74, 24-30.

Wang, C. 1981. Is Chinese reading comprehension like English reading comprehension: A bilingual study in content structure and recall. Unpublished MA thesis.

Yorio, C. A. 1971. Some sources of reading problems for foreign language learners. Language Learning, 21, 107-115.